What is claimed is:

1. A directly modulated optical module wherein optical output intensity of a semiconductor laser is modulated by changing a current allowed to flow into the semiconductor laser depending on a transmission signal, said directly modulated optical module comprising:

a driver circuit outputting a current having a trapezoidal waveform to the semiconductor laser, wherein the trapezoidal waveform is characterized in that a rate of change in fall time of the current is greater than a rate of change in rise time of the current.

2. A directly modulated optical module wherein optical output intensity of a semiconductor laser is modulated by changing a current allowed to flow into the semiconductor laser depending on a transmission signal, said directly modulated optical module comprising:

a driver circuit outputting a current which is overshot during a transient period associated with a rising edge of the current.

3. A directly modulated optical module wherein optical output intensity of a semiconductor laser is modulated by changing a current allowed to flow into the semiconductor laser depending on a transmission signal, said directly modulated optical module comprising:

a driver circuit which, if no control signal is received from the external, outputs a current having a trapezoidal waveform corresponding to the transmission signal, wherein the trapezoidal waveform is characterized in that fall time of the current is equal to or longer than rise time of the current; and

control means for controlling the driver circuit so as to make the fall time of the output current shorter than the rise time of the output current.

4. A directly modulated optical module wherein optical output intensity of a

semiconductor laser is modulated by changing a current allowed to flow into the semiconductor laser depending on a transmission signal, said directly modulated optical module comprising:

a driver circuit which outputs a current having a trapezoidal waveform corresponding to the transmission signal; and

control means for controlling the driver circuit so as to output an overshot current during a transient period associated with a rising edge of the current.

5. A directly modulated optical module according to claim 1, wherein the driver circuit is controlled so that a relation between the rate of change in the rise time and the rate of change in the fall time provides "the rate of change in rise time"/"the rate of change in fall time" □ 1.3.

6. A directly modulated optical module according to claim 3, wherein the driver circuit is controlled so that a relation between the rate of change in the rise time and the rate of change in the fall time provides "the rate of change in rise time"/"the rate of change in fall time" □ 1.3.

7. A directly modulated optical module according to claim 2, wherein the driver circuit is controlled so as to set a value of the overshoot based on an average voltage of the optical output waveform during a relaxation oscillation period.

8. A directly modulated optical module according to claim 4, wherein the driver circuit is controlled so as to set a value of the overshoot based on an average voltage of the optical output waveform during a relaxation oscillation period.

9. A directly modulated optical module comprising:

a semiconductor laser which, if a pulsed modulation current whose rise time and fall time are almost of the same length, has relaxation oscillation (21b) at a rising edge of the pulsed modulation current; and

a driver circuit which outputs a current having a trapezoidal waveform to the semiconductor laser, wherein a fall time of the current is shorter than a rise time of the current.

10. A method for driving a semiconductor laser comprising the step of:

allowing a current having a trapezoidal waveform whose fall time is shorter than rise time thereof to flow into a semiconductor laser which has relaxation oscillation (21b) at a rising edge of the current.